

APPLICANTS: Sharon BARKAI et al.  
SERIAL NO.: 09/919,845  
FILED: August 2, 2001  
Page 3

### REMARKS

The present response is intended to be fully responsive to all points of rejection raised by the Examiner in the Office Action dated July 12, 2005, and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

### Status of Claims

Claims 1 – 8 are pending in the application. Claims 1 – 8 have been rejected.

### CLAIM REJECTIONS

#### 35 U.S.C. § 102(e) Rejections

Claims 1, 2, and 8 have been rejected under 35 U.S.C. §102(e), as being anticipated by U.S. Patent No. 6,687,748 to Zhang et al. (hereinafter “Zhang”). Applicant respectfully traverses this rejection in view of the remarks that follow.

Zhang describes a simulation device for testing a network management server, where network devices are simulated by virtual network devices. The simulation device simulates the operation of network devices by generating network device alarm signals and responses to polling requests by the network management server that would otherwise be provided by actual network devices. The simulation device sends generated alarms and responses to the centralized network management server to test the actions taken by the server. All simulated communications described by Zhang are between the network management server and the simulation device.

The present application discloses a method for path discovery in distributed network management system, where network devices are modeled by corresponding software-based agents and device components (DCs). A simulated network message is sent within the model from a source DC to a destination DC, with the simulated message being

APPLICANTS: Sharon BARKAI et al.  
SERIAL NO.: 09/919,845  
FILED: August 2, 2001  
Page 4

transmitted from DC to DC within the model. The path within the model from the source DC to the destination DC and along any intermediate DCs is recorded to determine a corresponding path from a source network device to a destination network device and along any intermediate devices within the physical network. All simulated communications disclosed by the present application are between model-based device components.

Claim 1 recites, *inter alia*:

“...sending a simulated network message within a model of said computer network from a source device component within said model to a destination device component within said model...” (emphasis added).

Point #5 of the office action asserts that this recited feature is anticipated by Zhang at a) Fig. 1, b) col. 3, lines 10 – 22, and c) col. 4, lines 6 – 13. The present application defines a device component as “modeling one or more physical and/or logical aspects” of a network device, and that “DCs...may communicate directly with other DCs” (page 5, last paragraph). While Fig. 1 shows multiple Virtual Network Devices (VND) 38 representing network devices 16, Fig. 1 neither teaches nor suggests communications between VNDs. Furthermore, while Col. 3, lines 10 – 22, describes in general terms a network having network devices, network users, and a server for managing network devices, col. 3, lines 10 – 22, makes no mention of modeling network devices at all, let alone communication between network device models. Lastly, while col. 4, lines 6 – 13, describes a simulation device that simulates the operation of network devices, col. 4, lines 6 – 13 refers implicitly to a communications path between network management server 12 and virtual network devices 38 (“Network management server 12 manages virtual network devices 12...”), and makes no mention of communication between network device models.

Applicant therefore respectfully submits that the recited feature of “sending a simulated network message within a model of said computer network from a source device component within said model to a destination device component within said model” is not anticipated by Zhang.

APPLICANTS: Sharon BARKAI et al.  
SERIAL NO.: 09/919,845  
FILED: August 2, 2001  
Page 5

Claim 1 further recites, *inter alia*:

“...recording the device components traversed by said message, thereby determining said communications path” (emphasis added).

Point #5 of the office action asserts that this recited feature is anticipated by a) interpretation of Zhang, b) col. 5, lines 26 – 33, c) col. 5, lines 50 – 60, d) col. 8, lines 34 – 35, and e) col. 10, lines 39 – 49. As to the interpretation of Zhang, Zhang does not relate at all to the path that alarms and polling request responses take, but merely indicates that they are provided to network management server 12 by simulation device 18. Indeed, Zhang is only concerned with how network management server 12 processes such alarms and responses. Thus, Zhang mentions the word “path” only once, and only in connection with “path control addresses” of network devices (e.g., ATM VPI/VCI addresses) (“Each network address 24 is associated with a network device 16 managed by network management server 12. Network addresses 24 may be network layer addresses, path control addresses” (col. 3, lines 23 – 26)). Zhang thus neither teaches nor suggests determining a path between virtual network devices. Furthermore, while the Office Action asserts that the recited “simulated network message” is analogous to Zhang’s “alarm signals” (point #5 reference to col. 4, lines 27 – 35), which are generated by communication device 36 (“communication device 36 responds to the alarm events simulated by control commands 54 by generating alarm signals 40” at col. 4, lines 59 - 60) and transmitted to network management server 12, nowhere does Zhang show alarm signals traversing from a source VND to a destination VND to anticipate the recited “device components traversed by said message.” Lastly, as “The identical invention must be shown in as complete detail as is contained in the...claim” as per *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ 2d 1913, 1920 (Fed. Cir. 1989), Applicant respectfully submits that interpretation of recited elements not shown by Zhang is improper.

Col. 5, lines 26 – 33, describes communication device 36 as being “integral to” any type of network device and as communicating with network 14 on behalf of simulation device 18, yet makes no mention of “recording the device components traversed by said

APPLICANTS: Sharon BARKAI et al.  
SERIAL NO.: 09/919,845  
FILED: August 2, 2001  
Page 6

message” (i.e., “a simulated network message”) as recited by claim 1. Col. 5, lines 50 – 60, describes MIB 68 as comprising information associated with Zhang’s VNDs, but does not show “The identical invention...in as complete detail as is contained in the...claim” as per *Richardson v. Suzuki Motor Co.*” by not referring to MIB 68 recording VNDs traversed by a simulated message, and indeed cannot, as Zhang does not describe its simulated messages traversing VNDs at all. Col. 8, lines 34 – 35, describes a user manually providing control commands to communication device 26, which does not relate at all to recording VNDs traversed by simulated messages. Lastly, col. 10, lines 39 – 49, describes network management server 12 receiving responses from simulation device 18 and updating MIB 26, but neither teaches nor suggests recording VNDs traversed by simulated messages.

Applicant therefore respectfully submits that the recited feature of “recording the device components traversed by said message, thereby determining said communications path” is not anticipated by Zhang.

In view of the above arguments, Applicant respectfully submits that claim 1 is not anticipated by Zhang under 35 U.S.C. § 102(e), and is therefore allowable.

Claims 2 – 8 depend directly or indirectly from independent claim 1, and are, *a fortiori*, deemed allowable.

Applicant therefore respectfully requests that the rejection of claims 1 – 8 under 35 U.S.C. § 102(e) be withdrawn.

### **Conclusion**

Applicant respectfully submits that entry of the instant amendment and consideration of the above remarks renders the present application in condition for allowance, which action Applicant respectfully solicits.

APPLICANTS: Sharon BARKAI et al.  
SERIAL NO.: 09/919,845  
FILED: August 2, 2001  
Page 2

### **AMENDMENTS TO THE DRAWINGS**

The attached drawing sheet includes changes to Fig. 3 and replaces the original sheet including Fig. 3. In Figure 3, the line connecting element 300 and element 310 has been relabeled "YES", while the line connecting element 370 and the element labeled "FINISH" has been labeled "NO" to conform with the text of the specification.